

IV. REPLACEMENT DRAWINGS

Please replace FIG. 1 of the drawings with FIG. 1 of Replacement Sheet 1/1 (attached), which has been amended to correct the feature identified by "44."

V. REMARKS

Claims 9-25 and 27-30 are pending in this application. By this Amendment, claims 1-8 and 26 have been cancelled and the specification and claims 9, 20, 24, 27, and 29 have been amended. The above amendments and the following remarks are being made to facilitate early allowance of the presently claimed subject matter. Applicant does not acquiesce in the correctness of the objections and rejections and reserves the right to present specific arguments regarding any rejected claims not specifically addressed. Reconsideration in view of the following remarks is respectfully requested.

In the Office Action, “the drawings are objected to as failing to comply with 37 C.F.R. § 1.84(p)(4) because reference characters “82” (page 14, lines 3, 4) and “86” (page 14, line 16 and page 15, line 1) have both been used to designate the scrubber.” Office Action at 2. It is assumed that the Office is referring to FIG. 6 in making this objection. Applicant asserts, however, that the above amendments to the specification obviate the basis for this objection. Accordingly, Applicant respectfully requests withdrawal of the objection.

In the Office Action, FIG. 10 is objected to as failing to comply with 37 C.F.R. § 1.84(p)(5) because it includes reference characters not mentioned in the description. Applicant asserts, however, that the above amendment to the specification obviates the basis for this objection. Accordingly, Applicant respectfully requests withdrawal of the objection.

Finally, FIG. 1 is objected to because “44” should allegedly point to the stop cap and not the plug (which is identified in FIG. 8). The Replacement Sheet 1/1 includes this change and is attached hereto, in compliance with 37 C.F.R. § 1.121(d). Accordingly, Applicant respectfully requests withdrawal of the objection.

The disclosure is objected to because of the following informalities: “cordierite” is allegedly misspelled on page 10, line 2; “76” should allegedly read “80” on page 13, line 11; and

“86” should allegedly read “82” on page 14, line 16 and page 15, line 1. Applicant asserts that the basis for each of these objections has been obviated by the above amendments to the specification and respectfully requests withdrawal of the objection.

Claim 29 has been amended to correct an informality and obviate the basis of the Office’s objection to the claim. Accordingly, Applicant respectfully requests that the objection be withdrawn.

In the Office Action, claims 9-25 and 27-30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. By this amendment, claims 9, 20, 24, and 29 have each been amended to provide clearer claim language and/or antecedent basis. Accordingly, Applicant asserts that each of the amended claims and those claims depending from them satisfy 35 U.S.C. § 112, second paragraph and respectfully request withdrawal of the rejection.

In rejecting claim 27, the Office argues that “it is unclear as to how the filter components are related to the means for filtering particulates and means for filtering particulates and nitrogen oxide set forth on lines 5-6.” Office Action at 5. This rejection is respectfully traversed. Applicant asserts that the language of claim 27 is clear and satisfies 35 U.S.C. § 112, second paragraph. The claim recites “[a] filter system...comprising one or more attachable units...each unit including: means for housing filter components; means for filtering particulates positioned within the means for housing; and means for filtering particulates and nitrogen oxide.” Applicant respectfully asserts that the language of claim 27 makes clear the relationship of the recited elements, i.e., each unit includes a housing, a means for filtering particulates within the housing, and a means for filtering particulates and nitrogen oxide, which may or may not be

positioned within the housing. Accordingly, Applicant respectfully requests withdrawal of the rejection.

Claims 9, 10, and 27 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,961,931 to Ban *et al.* Applicant asserts that Ban *et al.* do not teach the claimed invention including a “filter system comprising one or more attachable units for varying a length of the filter system,” as recited in amended claim 9. Rather, the Ban *et al.* device comprises “cylindrical filter members having different diameters from one another and are arranged concentrically one inside another.” Column 3, lines 39-41. Thus, the size of the filter system of the Ban *et al.* device is variable, if at all, only along its width, *i.e.*, by adding cylindrical filter members of greater diameters.

In addition, Applicant respectfully urges that the Office is incorrect in its assertion that the Ban *et al.* device “encompass[es] both particulate filter unit[s] and combined particulate and nitrogen filter units.” Office Action at 6. Rather, Ban *et al.* teach a device comprising a particulate filter and two NO_x filters. “Each specimen is comprised of an NO_x catalyst-carrying layer (302 in FIG. 7), a particulate-trapping layer (301 in FIG. 7), and another NO_x catalyst-carrying layer (303 in FIG. 7).” Column 10, lines 42-45; column 16, lines 38-41. The particulate and NO_x filters are distinct layers in the Ban *et al.* device. Ban *et al.* do not, therefore, teach an attachable filter unit comprising, *inter alia*, a “combination particulate and nitrogen oxide filter unit[],” as recited in amended claim 9. Accordingly, for each of the reasons above, Applicant respectfully requests withdrawal of the rejection.

Claims 11 and 12 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ban *et al.* in view of U.S. Patent No. 6,056,796 to Chiang *et al.* Specifically, the Office asserts that “Chiang *et al.* discloses that the ceramic filter may be made by woven technique, and is coated with a component, such as silicon carbide, alumina, etc.” Office Action at 7. This

rejection is respectfully traversed. The Office has provided no suggestion or motivation to combine the teachings of Ban *et al.* and Chiang *et al.* Applicant asserts that no such suggestion or motivation exists, because the teachings of Ban *et al.* and Chiang *et al.* cannot be combined. It would not “have been an obvious matter of design choice to one having ordinary skill in the art to select an appropriate material for the filters, such as the one taught by Chiang *et al.* in the apparatus of Ban *et al.*, since such modification would have involved a mere substitution of known equivalent,” because Ban *et al.* explicitly teach away from use of the materials taught by Chiang *et al.* Office Action at 7. For example, Ban *et al.* state:

Among conventional filter elements of the above-described type, a wall-flow type, honeycomb-like porous filter element made of cordierite ceramic has been considered nearest-to-practical filters. But this filter element has some problems. One problem is that particulates tend to collect locally. Another problem is that due to its low heat conductivity, heat spots tend to develop during regeneration, so that the filter tends to melt and be damaged, or cracked due to thermal stress. Its durability is thus insufficient. Recently, a ceramic fiber trap formed by bundling ceramic fibers into a candle shape attracted much attention. This trap has, however, a problem in that its fibers tend to be destroyed due to decreased strength when exposed to high-temperature exhausts. Its durability is thus not sufficiently high either.

Column 2, lines 1-18.

Thus, not only are the materials taught by Chiang *et al.* not “known equivalents” of the materials taught by Ban *et al.*, they are specifically cited by Ban *et al.* as inferior materials. *Id.* Accordingly, there is no motivation or suggestion to combine the teachings of Ban *et al.* and Chiang *et al.* in the references themselves or the knowledge generally available to one of ordinary skill in the art. Further, given the express rejection by Ban *et al.* of the Chiang *et al.* materials, one having ordinary skill in the art would have no reasonable expectation of success in making such a combination. Accordingly, Applicant respectfully requests withdrawal of the rejection.

Claims 27 and 28 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ban *et al.* in view of Chiang *et al.* or U.S. Patent No. 4,544,388 to Rao *et al.* This rejection is respectfully traversed. Applicant asserts that the argument made above with respect to claim 9 is equally applicable to amended claim 27, *i.e.*, none of the references cited by the Office teaches, *inter alia*, a “filter system comprising one or more attachable units for varying a length of the filter system,” as recited in amended claim 27. Accordingly, Applicant respectfully requests withdrawal of the rejection.

Claims 9, 13-23, 27, and 28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of U.S. Patent No. 6,471,918 (the ‘918 patent). Claims 10-12, 24, 25, 29, and 30 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of the ‘918 patent in view of Ban *et al.* A terminal disclaimer in accordance with 37 C.F.R. § 1.321 and applicable to pending claims 9-30 is included herewith. Accordingly, Applicant respectfully requests withdrawal of the rejection.

Applicant respectfully submits that the application is in condition for allowance. Should the Examiner believe that anything further is necessary to place the application in better condition for allowance, he is requested to contact Applicant’s undersigned attorney at the telephone number listed below.

Respectfully submitted,



Spencer K. Warnick
Reg. No. 40,398

Date: May 26, 2005

Hoffman, Warnick & D’Alessandro LLC
Three E-Comm Square
Albany, New York 12207
Ph: 518-449-0044
Fax: 518-449-0047